

REMARKS

Claims 1-40 are pending in the instant application. Claims 1, 20, and 40 are independent claims, and claims 2-19, and 21-39 depend, respectively, from independent claims 1 and 20. The Applicants request reconsideration of the claims in view of the following remarks.

Claims 1-3, 20-28, 39, and 40 were rejected under 35 U.S.C. § 102(e) as being unpatentable over Shennib, U.S. Patent No. 6,167,138, "Shennib". The Applicants respectfully traverse the rejections. The Applicants respectfully submit that independent claims 1, 20, and 40 are different from the cited reference for at least the following reasons.

The Applicants set forth in claim 1 a hearing test device comprising a testing probe for insertion into an ear canal of a test subject, an audio source for transmitting stimuli into the ear canal, and a microphone for receiving response signals from the ear canal in response to the transmitted stimuli. The hearing test device also comprises a processor for determining from the response signals whether at least one condition related to the position of the testing probe in the ear canal is satisfied and for automatically starting a hearing test if the at least one condition is satisfied.

Shennib is different than the Applicants' invention as recited in claim 1. Shennib discloses a hearing aid fitting system providing evaluation of the hearing function of an individual (abstract). Shennib discloses a pair of intra-canal prosthesis having a microphone probe positioned in both ear canals to measure in-the-ear canal responses and hearing assessment during hearing aid fitting (abstract).

The evaluation method disclosed by Shennib involves both ears in a listening experience with each ear receiving a portion of the acoustic energy according to the relationship between each ear (col. 9, lines 54-57). An infrared tracking method is employed to position and maintain the head in the proper position with respect to a speaker array wherein a light reflective target object is placed just below the ear lobe of the individual (col. 14, lines 54-58).

Shennib discloses that the intra canal prosthesis "ICP" is designed to represent physical and electro-acoustical characteristics of the desired type of hearing aid (col. 18, lines 8-10). The ICP is also provided with a vent canal for pressure equalization during a hearing aid fitting (col. 18, lines 28-29).

According to Shennib, a novel feature of the invention is the ability to measure and quantify the occlusion effect of a simulated hearing aid, as well as a fitted hearing aid (col. 21, lines 10-12).

The system of Shennib is also provided with a hearing aid select/adjust window permitting hearing aid selection and subsequent adjustment (col. 24, lines 29-30, and Figure 26). Hearing aid selection can be automatic or manual (col. 24, lines 32-33, Figure 26). Automatic selection involves selecting one or more hearing aids based upon the fitting algorithm selected (col. 24, lines 35-36 Figure 26). Hearing aid parameters of a selected hearing aid model are adjusted automatically or manually depending on the hearing aid Automatic/Manual option and the fitting method selected (col. 24, lines 54-57, Figure 26).

Shennib is different from the Applicants' claimed invention as recited in claim 1. Shennib is a hearing aid fitting system and method. In contrast to Shennib, the Applicants set forth a hearing test device in claim 1. Shennib is not a hearing test device.

Shennib is also different from the Applicants' claimed invention because Shennib merely discloses tracking the position of the head with a light reflective target object placed just below the ear lobe of the individual. The Applicants set forth a hearing test device that determines at least one condition related to the position of the testing probe in the ear canal of the individual. Shennib is silent regarding determining anything related to a position of a testing probe in an ear canal.

Shennib utterly fails to disclose, teach, or suggest a processor for determining from response signals whether at least one condition related to the position of the testing probe in the ear canal is satisfied. Furthermore, Shennib is also silent regarding using a processor for automatically starting a hearing test if at least one condition is satisfied.

Therefore, for at least the reasons set forth above, the Applicants respectfully assert that claim 1 is allowable over the cited reference. The Applicants request that rejection of independent claim 1 under 35 U.S.C. § 102(e) be withdrawn.

Regarding dependent claims 2-19, which depend from independent claim 1, in light of independent claim 1 being allowable over the cited reference, the Applicants respectfully submit that rejection of the dependent claims is now moot. The Applicants respectfully assert that dependent claims 2-19 are allowable over the cited reference. The Applicants request that rejection of dependent claims 2-19 be withdrawn.

The Applicants set forth in claim 20 a method of starting a hearing test. The method being employed by a hearing test device having a testing probe positioned in an ear canal of a test subject. The method comprises transmitting a plurality of stimuli into the ear canal and receiving a plurality of response signals from the ear canal in response to the plurality of stimuli.

The method also comprises performing at least one test related to the position of the testing probe in the ear canal using at least a portion of the plurality of response signals, and automatically starting a hearing test if the at least one test is passed.

Shennib is different from the Applicants' claimed invention as recited in claim 20. Shennib is a hearing aid fitting system and method. In contrast to Shennib, the Applicants set forth a method of automatically starting a hearing test in claim 20. Shennib is not a hearing test device and does not disclose a method of automatically starting a hearing test.

The device disclosed by Shennib is also different from the claim 20 because Shennib merely discloses tracking the position of the head with a light reflective target object placed just below the ear lobe of the individual. In contrast, the Applicants set forth performing at least one test related to the position of the testing probe in the ear canal using at least a portion of the plurality of response signals, and automatically starting the hearing test if at least one test is passed.

Shennib utterly fails to disclose, teach, or suggest performing at least one test related to the position of the testing probe in the ear canal using at least a portion of the plurality of response signals. Furthermore, Shennib is silent regarding automatically starting a hearing test if the at least one test is passed.

Therefore, for at least the reasons set forth above, the Applicants respectfully assert that claim 20 is allowable over the cited reference. The Applicants request that rejection of independent claim 20 under 35 U.S.C. § 102(e) be withdrawn.

Regarding dependent claims 21-39, which depend from independent claim 20, in light of independent claim 20 being allowable over the cited reference, the Applicants respectfully submit that rejection of the dependent claims is now moot. The Applicants respectfully assert that dependent claims 21-39 are allowable over the cited reference. The Applicants request that rejection of dependent claims 21-39 be withdrawn.

The Applicants set forth in independent claim 40 a method of starting a hearing test. The method being employed by a hearing test device having a testing probe positioned in an ear canal of a test subject. The method comprising (a) determining whether the testing probe is properly positioned in the ear canal, and (b) automatically starting the hearing test if it is determined that the testing probe is properly positioned in the ear canal. The method also comprises automatically repeating steps (a) and (b) if it is determined that the testing probe is not properly positioned in the ear canal.

The device disclosed by Shennib is different from the Applicants' claimed invention as recited in claim 40. Shennib is a hearing aid fitting system and method. In contrast to Shennib, the Applicants set forth a method of automatically starting a hearing test in claim 20. Shennib is not a hearing test device and does not disclose a method of automatically starting a hearing test.

Shennib is also different from the Applicants' claim 40 because Shennib merely discloses tracking the position of the head with a light reflective target object placed just below the ear lobe of the individual. The Applicants set forth determining whether the testing probe is properly positioned in the ear canal and automatically starting a hearing test if the at least one test is passed.

Shennib utterly fails to disclose, teach, or suggest determining whether the testing probe is properly positioned in the ear canal. Furthermore, Shennib is silent regarding automatically starting a hearing test if the at least one test is passed. Additionally, Shennib is silent regarding automatically repeating a determining step and an automatic starting step if it is determined that the testing probe is not properly positioned in the ear canal.

Therefore, for at least the reasons set forth above, the Applicants respectfully assert that claim 40 is allowable over the cited reference. The Applicants request that rejection of independent claim 40 under 35 U.S.C. § 102(e) be withdrawn.

Dependent claims 4-19, and 29-38 were rejected under 35 U.S.C. § 103(a) as being obvious over Shennib in view of Zoth et al., U.S. Patent No. 6,231,521, "Zoth". The Applicants respectfully traverse the rejections.

Zoth fails to remedy the deficiencies of Shennib. Zoth fails to disclose determining whether a testing probe is properly positioned in an ear canal and automatically starting a hearing test if the at least one test is passed. Therefore, the proposed combination of Shennib and Zoth fails to disclose the Applicants' claimed invention as recited in independent claims 1, 20, and 40, and dependent claims 2-19 and 21-39, respectively.

Therefore, for at least the reasons set forth above, the Applicants respectfully assert that dependent claims 4-19 and 29-38 are allowable over the proposed combination of references. The Applicants request that rejection of dependent claims 4-19 and 29-38 under 35 U.S.C. § 103(a) in view of the proposed combination of references be withdrawn.

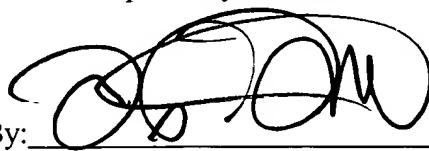
Additionally, because dependent claims 4-19 and 29-38 depend from independent claims 1 and 20, respectively, and in light of independent claims 1 and 20 being allowable over the proposed combination of references, the Applicants respectfully submit that rejection of the dependent claims 4-19 and 29-38 is now moot. The Applicants respectfully assert that dependent claims 4-19, and 29-38 are allowable over the cited references. The Applicants request that rejection of dependent claims 4-19 and 29-38 be withdrawn.

CONCLUSION

Based on at least the foregoing, the Applicants believe that claims 1-34 are in condition for allowance. If the Examiner disagrees or has any question regarding this submission, the Applicants request that the Examiner telephone the undersigned at (312) 775-8000.

A Notice of Allowance is courteously solicited.

Respectfully submitted,

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